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09/517,974	03/03/2000	Steven V. Larson	13661-107	5719
32300	7590	04/20/2007	EXAMINER	
BRIGGS AND MORGAN P.A. 2200 IDS CENTER 80 SOUTH 8TH ST MINNEAPOLIS, MN 55402			STRIMBU, GREGORY J	
ART UNIT		PAPER NUMBER		
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09 517 974

EXAMINER

ART UNIT      PAPER

20060614

DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner for Patents

The following amended Examiner's answer is in response to the communication from the Board of Patent and Appeals and Interferences. In said communication, the Board pointed out that the Examiner's answer of July 5, 2006 failed to include a list of the evidence relied upon. Accordingly, the amended Examiner's answer includes a list of the evidence relied upon. Therefore, it appears that the appeal is in proper form for further review by the Board of Patent Appeals and Interferences.



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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

**MAILED**

APR 20 2007

Application Number: 09/517,974  
Filing Date: March 03, 2000  
Appellant(s): LARSON, STEVEN V.

**GROUP 3600**

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Gerald E. Helget  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed May 30, 2006 appealing from the Office action mailed October 26, 2005.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

US 5,921,043	McDonald	July 1999
US 5,581,591	Ryan et al.	December 1996
US 5,467,764	Gamow	November 1995
US 4,538,380	Colliander	September 1985
US 3,684,342	Jansen	August 1972

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 21 is rejected under 35 U.S.C. 102(b) as being anticipated by Gamow.

Gamow discloses a door 170 and frame 180 in combination with an air handling unit 110 and 120 for a building having a roof, wherein the door and frame can withstand a pressure differential of greater than six inches of air pressure, the air handling unit being capable of being mounted on a roof of a building.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in figure 1 in view of McDonald, Ryan et al. and Gamow. The admitted prior art in figure 1 discloses an air handling unit mountable on the roof of a building comprising, a hinged door (D) engaging the air handling unit and comprising a front wall (not numbered, but shown in figure 1) and side walls (not shown) and a rear wall (not shown) with an insulating material (see page 2, lines 16-17), a gasket (not shown), the hinged door and air handling unit are capable of withstanding a pressure differential of up to six inches of air pressure (see page 2, lines 18-19). The admitted prior art is silent concerning a frame, a gasket with anti-roll extensions and a hollow core.

However, McDonald discloses a door and frame combination, comprising a frame 10, a hinged door 56 engaging the frame, the door 56 further comprising a front wall (not numbered), rear wall (not numbered), and side walls (not numbered) enclosing a hollow core (not numbered) and insulating material 66 filling the hollow core. The insulating material is an expanding polyurethane foam. As shown in figure 1, the door includes a window (not numbered) (claim 8).

It would have been obvious to one of ordinary skill in the art to provide the admitted prior art of figure 1 with a frame, and a hollow core and insulating material, as taught by McDonald, to increase the insulating value and strength of the door when in the closed position.

Additionally, Ryan et al. discloses a gasket 10 for sealing between a door and a door frame wherein the gasket includes anti-roll extensions 15-17, 20 and 21 and has a central hollow core.

It would have been obvious to one of ordinary skill in the art to provide the admitted prior art of figure 1 with a anti-roll extensions, as taught by Ryan et al., to improve the seal between the door and the door frame.

Finally, Gamow discloses a seal (not numbered, but see column 4, lines 6-9) capable of withstanding a pressure differential of greater than 6.5 inches of pressure.

It would have been obvious to one of ordinary skill in the art to provide the admitted prior art in figure 1 with a seal capable of withstanding a pressure differential greater than 6.5 inches, as taught by Gamow, to prevent air from moving between the door and door frame during high pressure differential situations.

With respect to claim 3, the admitted prior art of figure 1 is silent concerning the particular thickness of the side walls. However, one of ordinary skill in the art is expected to routinely experiment with parameters so as to ascertain the optimum or workable ranges for a particular use. Accordingly, it would have been no more than an obvious matter of engineering design choice, as determined through routine

experimentation and optimization, for one of ordinary skill to provide the side walls with a thickness of 2 inches to improve the insulating value and strength of the door.

Claims 9-11 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in figure 1 in view of McDonald, Ryan et al. and Gamow. The admitted prior art in figure 1 discloses an air handling unit mountable on the roof of a building comprising, a hinged door (D) engaging the air handling unit and comprising a front wall (not numbered, but shown in figure 1) and side walls (not shown) and a rear wall (not shown) with an insulating material (see page 2, lines 16-17), a gasket (not shown), the hinged door and air handling unit are capable of withstanding a pressure differential of up to six inches of air pressure (see page 2, lines 18-19). The admitted prior art is silent concerning actually mounting the air handling unit to an edifice, a frame, a gasket with anti-roll extensions and a hollow core.

It would have been obvious to one of ordinary skill in the art to fixedly mount the air handling unit on a non-movable edifice, as taught by the admitted prior art in figure 1, to conserve land.

McDonald discloses a door and frame combination, comprising a frame 10, a hinged door 56 engaging the frame, the door 56 further comprising a front wall (not numbered), rear wall (not numbered), and side walls (not numbered) enclosing a hollow core (not numbered) and insulating material 66 filling the hollow core. The insulating material is an expanding polyurethane foam. As shown in figure 1, the door includes a window (not numbered) (claim 8).

It would have been obvious to one of ordinary skill in the art to provide the admitted prior art of figure 1 with a frame, and a hollow core and insulating material, as taught by McDonald, to increase the insulating value and strength of the door when in the closed position.

Additionally, Ryan et al. discloses a gasket 10 for sealing between a door and a door frame wherein the gasket includes anti-roll extensions 15-17, 20 and 21 and has a central hollow core.

It would have been obvious to one of ordinary skill in the art to provide the admitted prior art of figure 1 with a anti-roll extensions, as taught by Ryan et al., to improve the seal between the door and the door frame.

Finally, Gamow discloses a seal (not numbered, but see column 4, lines 6-9) capable of withstanding a pressure differential of greater than 11 inches of pressure.

It would have been obvious to one of ordinary skill in the art to provide the admitted prior art in figure 1 with a seal capable of withstanding a pressure differential greater than 11 inches, as taught by Gamow, to prevent air from moving between the door and door frame during high pressure differential situations.

With respect to claim 10, the admitted prior art of figure 1 is silent concerning the particular thickness of the side walls. However, one of ordinary skill in the art is expected to routinely experiment with parameters so as to ascertain the optimum or workable ranges for a particular use. Accordingly, it would have been no more than an obvious matter of engineering design choice, as determined through routine

experimentation and optimization, for one of ordinary skill to provide the side walls with a thickness of 2 inches to improve the insulating value and strength of the door.

Claims 16, 17, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in figure 1 in view of McDonald, Ryan et al., and Gamow, as applied to claims 9-11 and 15 above, and further in view of Colliander, and Jansen.

Colliander discloses a gasket comprising a friction reducing material 21 on a gasket wall 19.

It would have been obvious to one of ordinary skill in the art to provide the admitted prior art of figure 1, as modified above, with a friction reducing material, as taught by Colliander, to ensure the easy opening and closing of the door.

Moreover, Jansen discloses a thermally insulating panel 12 comprising a thermal pocket (not specifically numbered, but seen in figure 2) being filled with an insulating material 50 comprising high density polyurethane.

It would have been obvious to one of ordinary skill in the art to provide the admitted prior art of figure 1, as modified above, with thermal pockets and attendant insulating material, as taught by Jansen, to provide an efficient means of manufacturing the door and frame combination.

With respect to claim 20, the admitted prior art of figure 1 is silent concerning the particular thickness of the side walls. However, one of ordinary skill in the art is expected to routinely experiment with parameters so as to ascertain the optimum or

workable ranges for a particular use. Accordingly, it would have been no more than an obvious matter of engineering design choice, as determined through routine experimentation and optimization, for one of ordinary skill to provide the side walls with a thickness of 2 inches to improve the insulating value and strength of the door.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in view of McDonald, Ryan et al. and Gamow as applied to claims 1-4 and 8 above, and further in view of Colliander. Colliander discloses a gasket comprising a friction reducing material 21 on a gasket wall 19.

It would have been obvious to one of ordinary skill in the art to provide the admitted prior art of figure 1, as modified above, with a friction reducing material, as taught by Colliander, to ensure the easy opening and closing of the door.

Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in figure 1 in view of McDonald, Ryan et al. and Gamow as applied to claims 1-4 and 8 above, and further in view of Jansen.

Jansen discloses a thermally insulating panel 12 comprising a thermal pocket (not specifically numbered, but seen in figure 2) being filled with an insulating material 50 comprising high density polyurethane.

It would have been obvious to one of ordinary skill in the art to provide the admitted prior art of figure 1, as modified above, with thermal pockets and attendant

insulating material, as taught by Jansen, to provide an efficient means of manufacturing the door and frame combination.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in view of McDonald, Ryan et al. and Gamow as applied to claims 9-11 and 15 above, and further in view of Colliander. Colliander discloses a gasket comprising a friction reducing material 21 on a gasket wall 19.

It would have been obvious to one of ordinary skill in the art to provide the admitted prior art of figure 1, as modified above, with a friction reducing material, as taught by Colliander, to ensure the easy opening and closing of the door.

Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in figure 1 in view of McDonald, Ryan et al. and Gamow as applied to claims 9-11 and 15 above, and further in view of Jansen.

Jansen discloses a thermally insulating panel 12 comprising a thermal pocket (not specifically numbered, but seen in figure 2) being filled with an insulating material 50 comprising high density polyurethane.

It would have been obvious to one of ordinary skill in the art to provide the admitted prior art of figure 1, as modified above, with thermal pockets and attendant insulating material, as taught by Jansen, to provide an efficient means of manufacturing the door and frame combination.

**(10) Response to Argument**

It should first be noted that the appellant's claimed invention is no more than a building structure, e.g., a shed-type structure, that provides for the flow of air therein. The appellant admits that such structures are known in the art and are currently capable of withstanding a pressure differential of six inches of mercury. See page 2 of the instant application and figure 1. The appellant's "invention" comprises replacing the prior art seal in a known structure with a seal that is capable of withstanding a pressure differential of greater than 6 inches of mercury. The appellant's claimed invention is not allowable over the rejection set forth in the Office action of October 26, 2005.

First, the appellant contends that Gamow fails to disclose an air handling unit that can be mounted on the roof of a building. Clearly this position is untenable. Gamow discloses an air handling unit since it provides for the flow of air therein to pressurize and depressurize the chamber. Additionally, the chamber of Gamow is clearly mountable on the roof of a building such as a skyscraper. Mounting the chamber of Gamow on the roof of a building does not teach away from the portable nature of the chamber since the chamber could be mounted via bolts which could be easily undone so that the chamber can be moved. It should be noted that claim 21 only requires the chamber be capable of being mounted on the roof of a building.

Second, the appellant contends that Gamow is not in the applicant's field of endeavor. Even if the appellant's argument were true, it would not prevent Gamow from being used in a 35 USC 103(a) rejection. It has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent

to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Gamow is analogous art because both the applicant and Gamow were concerned with the particular problem of preventing air from an ambient high pressure area moving between a hinged door and a frame to interior having a lower pressure than the ambient pressure.

Third, the appellant contends that Jansen fails to disclose opposed thermal pockets in the door and in the frame with the thermal pockets being filled with high-density polyurethane. This argument is not persuasive because the appellant has engaged in a piecemeal analysis of the references. Jansen is being utilized merely for the teachings of a thermal pocket (shown in the bottom right hand corner of figure 2 of Jansen) which is filled with a high-density polyurethane 50. One with ordinary skill in the art, when presented with the teachings of Jansen, would be motivated to provide a high density polyurethane foam throughout the structure of the admitted prior art of figure 1, i.e., both the frame and the door. One of ordinary skill in the art would be exhibiting less than normal skill in the art if he or she would only provide the frame of the admitted prior art of figure 1 with the insulating foam when both the frame and the door suffer from heat loss. Additionally, McDonald discloses that it is well known to provide both the frame of a structure and a door with insulated pockets. One cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Therefore, the rejection of claims 1-17 and 19-21 as set forth above and in the Office action of October 26, 2005 is proper.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,



Gregory J. Strimbu  
Primary Examiner  
Art Unit 3634  
April 17, 2007

Conferees:

Peter Cuomo 

Carl Friedman 